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Assessment of the Health Seeking Behavior of Senior Nursing Students in Saudi Arabia

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Abstract
Background: Healthy diet habits and active life style are recognized as the most important factors influencing one's well-being. Nurses play an essential role in the healthcare system, yet little is known about what nurses and nursing students do to stay healthy. This study was conducted to provide new insights into nursing students' health-seeking behavior. The hypothesis of this investigation was that when nursing students attain health-related knowledge during the course of their education, their health care beliefs and practices could be improved. **Purpose:** The aim of the study was to assess the health-seeking behavior of Saudi senior nursing students, and to evaluate whether it is influenced by their knowledge of health-related studies. **Method:** A cross-sectional design was used to collect data for the study. A sample of 74 senior nursing students from the College of Nursing (CON-R) at the King Saud bin Abdul-Aziz University for Health Sciences in Riyadh were interviewed after obtaining their informed consent to participate in the study. The interview was conducted via a structured questionnaire, which was developed by the researchers and reviewed by a nursing faculty member. The survey included questions related to the socio-demographic data, medical history, health awareness, and health-seeking behavior of the students. The data was entered and analyzed using SPSS software. **Results:** The majority of students (86.3%) did not have any chronic diseases. A large number of students (78.37%) stated that they visited the doctor only when they felt ill. Ninety five percent used medications without a prescription, and they used these medications for conditions such as flu, fever, headache, back pain, constipation, cough, and heartburn. The majority of students (95.9%) believed that nursing and medical courses helped them in altering their health behavior by gaining more understanding of the body functions, and by increasing their awareness of certain diseases and medications. **Conclusion:** This study reflected on the healthy lifestyle modifications achieved by Saudi senior nursing students as a result of acquiring health-related knowledge through their nursing and medical education.
Key words: health behavior, nursing, knowledge, Saudi Arabia

Introduction

It is well recognized that providing knowledge on illness and health will eventually promot a change in an individuals' behavior, specifically towards a more beneficial healthy lifestyle. Nevertheless, there has been growing evidence that providing education and knowledge at the individual level is probably not sufficient in itself to promote a change in behavior [1].

A health-promoting lifestyle has been defined as a''multi-dimensional pattern of self-initiated actions and perceptions that serve to maintain or enhance the levelof wellness, self-actualization, and fulfillment of the individual" [2]. Mosby's Medical Dictionary defines health behavior as "an action taken by a person to maintain, attain, or regain good health and to prevent illness. Health behavior reflects a person's health beliefs. Some common health behaviors are exercising regularly, eating a balanced diet, and obtaining necessary inoculations" [3]. So whenever individuals adopt a healthy lifestyle, they are doing so to prevent the occurrence of a disease. In contrast, when individuals feel ill, then they adopt the sick role behavior, which refers to all the activities designed to cure disease and restore health after a diagnosis has been made.

Previous studies done on health-seeking behavior of health providers found that the health habits of physicians are generally better than the rest of the population [4]. Physicians are more likely to undergo routine

checkups and timely investigations [5-6]. Moreover, the majority of them do regular screening such as: cholesterol level, blood pressure, breast examination and colonoscopy [4]. On the other hand, due to the prolonged working hours, some physicians have compromised their health behavior since they have less time to exercise and sleep [7].

There are few research studies investigating the health practices of nursing students. Most research on health-seeking behavior has been undertaken in Western and European countries [8]. Boyd (1988) studied the impact of a health-promotion-focused curriculum on the personal health habits of 60 baccalaureate nursing students' level of wellness. The results indicated that health behaviors improved for the nursing group compared to a control group of non-nursing student [9]. On the other hand, a study by Dittmar et al (1989) on New York Nursing students found that they had significantly poorer health practices, since they had higher rates of smoking than other health professionals, used seat belts less frequently, had irregular eating habits and had higher rates of alcohol consumption [10].

The hypothesis of this study was that health care beliefs and practices of Saudi nursing students could be improved as a result of acquiring health-related knowledge. Since literature on health behavior among nursing students in the Arab world is limited, the study aimed to investigate the health-seeking behavior of Saudi senior nursing students and to assess whether it confirms our assumption that acquiring health-related knowledge would have a positive effect on their health seeking behavior.

Method

A cross-sectional design was used to collect data for the study. A convenient sample of 74 senior nursing students from the College of Nursing at the King Saud bin Abdul-Aziz University for Health Sciences in Riyadh were included. This college only enrolls female students in its curriculum. The sample included both Stream one and Stream two students. Stream one students are high school graduates enrolled in the four-year program of 130 credit hours. Stream two students are those with a Bachelor degree of science enrolled in the nursing program, for at least four semesters of 75-95 credit hours. With a confidence level of 95 and confidence interval of 10.65, the sample size was computed to be 70 subjects and it was increased to 74 to insure representativeness of the sample

A structured interview was carried out with each subject by one of the researchers involved in this study at the Nursing College. The duration of each interview ranged from 10 to 12 minutes. A brief background about the study was explained to each participant, after which they were given an informed consent to sign in order to participate in the study. The content validity of the instrument was assessed by an expert who examined the tool and approved it. Test retest method was used to determine the reliability of the tool, by applying this tool twice on 5 subjects who were excluded from the study. The reliability was 0.79. The questionnaire included items related to the subjects' awareness of their health profile, whether or not they underwent any regular medical checkup or breast self-examinations, and whether they took any medications. Data was coded for entry and analysis using SPSS statistical software package version 18. Data was presented using descriptive statistics in the form of frequencies and percentages. Interval and ratio variables were presented in the form of means and standard deviations.

Results

The mean age of the participants in the study was 22.7 (+/- 2.1) years old, and more than half of the students were aged between 20 – 22 years. The majority of students (71.62%) were single. Most of the participants (82.4%) were Stream I students (Table 1). A good number of the students (85.1%) did not have any chronic diseases, and out of those who had chronic diseases (14.86%): 45% had anemia; 18% had asthma and chronic back pain, and 9% had hyperlipidemia and irritable bowel syndrome (Table 2). Almost all the students knew their weight and height, and about 50% identified their blood pressure and blood hemoglobin level (Table 3). In addition, about 44.6% of the female students underwent regular breast examination. As shown in table 3, the largest proportion of students (78.37%) visited the doctor only when they felt ill. Forty percent of the surveyed nursing students had visited a doctors' office for different health problems over the past 6 months (Table 4). The most common symptoms leading to a doctors' visit included skin rash, tooth ache, and food poisoning (83.8%, 78.4%, and 73% respectively); however, many of the students did not visit a doctor when they suffered from headaches, constipation, and cough (97.3%, 94.6%, and 93.2% respectively) (Table 5). Almost all students (95.9%) used medications without a doctor's prescription. The majority of students (91.9%) used analgesics without the doctors' order, while 45% used antibiotics without any prescription, 24% used weight control medication, and 20.3% used antihistamines (Table 6). The majority (95.9%) believed that nursing and

medical courses helped them in improving their health behavior. Most of the participants (63%) stated that as a result of taking health-related courses, they had become more conscious of the signs and symptoms of diseases and could independently make self-diagnosis and treatment. Meanwhile, only 27% mentioned that recognizing the signs and symptoms of certain diseases encouraged them to change their lifestyle and to increase the frequency of their routine check-ups. Ten percent of the students declared thatthey were not concerned about their health; though they were aware of what proper health behavior was (Table 7).

Discussion

This study was conducted to assess the health-seeking behavior of the senior nursing students in Saudi Arabia, and to test whether their health care beliefs and practices of can be altered as a result of acquiring health-related education. The vast majority of students believed that the nursing and medical courses helped them to become more aware of the signs and symptoms of diseases, which in turn aided them in taking better care of their health.

During the college years, individuals are transitioning from their adolescence to adulthood, and are gaining extensive knowledge through their courses. More often than not, students would try to apply the information they attain from their courses on themselves. Since nursing students are studying about health and medicine, their lifestyle may generally be better than that of the general population [11]. There have been some studies assessing whether there is any relationship between health beliefs and knowledge of students and implementing them into daily practice. A study done on Turkish nursing students found that there was an improvement in pursuing a healthy lifestyle throughout their education [12]. Moreover, Najem et al (1995) confirmed the assumptions that preventive care beliefs and practices of health science students are superior to those of the general public [13]. He found that 99% of the students identified their blood pressure, whereas only 10% were cigarette smokers and 3% were heavy drinkers. Approximately 68% of the students exercised regularly and 78% of them used seat belts in their vehicles. About 81% and 79% of the female students had regular clinical breast examinations (CBE) and pelvic examinations, respectively [13]. A study on African American nursing students demonstrated that over 60% of them were able to control stress and maintain a healthy nutritional status [14].

In the Middle East, there has been limited data on students' health-promoting behaviors. A study comparing Jordanian and Canadian nursing students found a significant difference in health responsibility, physical ability and interpersonal relationships. Nevertheless, both groups had overalllow scores in their general health behavior [15].

A large number of the nursing students at the CON-R of the King Saudi Bin Abdul-Aziz University for Health Sciences identified their weight and height, a finding that is consistent with Najem's et al study (1995) on the health risk factors and health promoting behavior of medical, dental and nursing students in New Jersey. Najem's study demonstrated that 99% of the students knew their blood pressure, which is a significant indicator of nursing students awareness of their own health [13]. This is significantly higher than the 51% of students who identified their own blood pressure in our study.

Breast self-examination (BSE) is a simple, inexpensive, non-invasive adjuvant screening method for the early detection of breast cancer in women. Multiple studies have provided evidence that women who practice BSE regularly are more likely to detect a mass in the early stage of its development and tend to have longer survival [16]. Nevertheless, a minority of women actually do conduct BSE, probably due to lack of knowledge. Individuals in health care have better rates of conducting BSEs, and several studies in the literature have found that nursing students have higher rates in performing BSEs than the rest of the population [13, 17]. Alsaif et al conducted a study on Saudi Arabian female nursing students and illustrated that 66% of them performed regular BSEs, a number that is considerably higher than the 46% reported in our study [17]. Our results seem to be consistent with the data of other studies from the region. A study by Memis et al found that 53% of female nursing and midwifery students performed BSE, but with only 39% performing it monthly in the past 12 months [18]. The distribution of participants performing BSE according to their school years were 5% in the first year, 53% in the second year, 86% in the third year, and 90% in the fourth year [18]. Our study would have been more interesting if we had stratified the data according to the academic year, since this correlates with the level of knowledge and how well the individual practices the knowledge given.

Only 21.62% of the nursing students at the King Saud Bin Abdul-Aziz University actually underwent routine checkups, compared to a study on preventive, lifestyle, and personal health behaviors among physicians in the United States, which found that 52% had regular medical checkup visits [5].

This study found that a large number of the nursing students performed self-treatment and used medications without a doctors' prescription. This confirmed the results by Chen et al (2008) on the personal

health care choices of physicians, which found that 44% of doctors took care of themselves when they were sick and 62% wrote their own prescriptions [19].

In the Arab world, individuals often define health as the absence of disease, andhardly any attention is given to health and health-promoting behaviors. Saudi subjects will often visit their doctor only when feeling ill. More often than not, no health education is provided in schools, and the media rarely promotes health-seeking behaviors. That is why this study was of particular interest, since these students have no exposure to medical-related issues prior to entering nursing school, and they represent a minority in the society. In addition, this study is the first of its kind in Saudi Arabia, providing insight into the mentality of Saudi students who have gained knowledge about health, and how they applied it to their daily practice.

Future studies could be conducted to compare the health-seeking behavior between nursing and medical students, or to compare health attitudes between junior and senior nursing students.

Conclusion

The participants of this study stated that their health seeking behavior has improved as a result of acquiring more knowledge during the medical and nursing education. This study also demonstrated that students had shown both positive and negative health behavior alterations. Among the desired behavior was being aware of their health profile and the signs and symptoms of the diseases. However, some of the undesirable actions included taking medications without prescriptions, and not undergoing routing checkups. This study was performed only on nursing students in one university; accordingly more studies will need to be conducted on a wider sample of nursing students in Saudi Arabia.

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Conflict of Interest

Researchers declare no conflict of interest with any organization regarding the materials discussed in this manuscript.

Table (1): Socio-demographic characteristics of the sample

	No. of students N = 74	**Percentage**
Age (years		
<20	1	1.4%
20 – 22	40	54.05%
23 – 25	24	32.4%
>25	9	12.1%
Mean	22.7	
SD	2.1	
Stream		
Stream I	61	82.4%
Stream II	13	17.6%
Marital status		
Single	53	71.62%
Married	21	28.38%

Table (2): Medical history of the sample

	No. of students N = 74	Percentage
Chronic disease		
Yes No	11 63	14.86% 85.14%
Types of chronic disease		
Sickle cell anemia, anemia Asthma Back problems	5 2 2	45.46% 18.18% 18.18%
Hyperlipidemia	1	9.09%
Irritable bowel syndrome	1	9.09%

Table (3): Awareness of the students about their health profile

Parameter	No. of students N = 74	Percentage
Weight	67	90.5%
Height	68	91.9%
Blood pressure	38	51.4%
Cholesterol level	8	10.8%
Hemoglobin level	34	45.9%

Table (4): Health seeking behaviors of the sample

How often do you undergo a checkup	No. of students	Percentage
>6 months	9	12.16%
6 – 12 months	5	6.75%
>12 months	2	2.7%
Only when I get sick	58	78.37%
Last Doctors Visit		
Less than 1 month	26	35.12%
2 – 6 months	30	40.54%
6 12 months	12	16.22%
>12 months	6	8.12%

Table (5): Medical conditions encountered by the surveyed sample

	No. of students	Percentage
Medical conditions for which students DO NOT visit a doctor's office		
Flu	55	74.3%
Fever	54	73%
Headache	72	97.3%
Back pain	63	85.1%
Constipation	70	94.6%
Cough	69	93.2%
Premenstrual syndrome	58	78.4%
Heart burn	51	68.9%
Diarrhea	63	85.1%
Medical Conditions for which students DO visit a doctor's		
Chest pain	50	67.6%
Abdominal pain	45	60.3%
Food Poisoning	54	73.0%
Skin rash	62	83.8%
Toothache	58	78.4%

Table (6): Types of medications used by students without prescription

Types of medication	**Frequency N = 74**	**Percentage**
Pain killers	68	91.9%
Antibiotics	34	45.9%
Antacids	11	14.9%
Bronchodilators	7	9.5%
Antihistamines	15	20.3%
Antispasmodics	10	13.5%
Antiemetics	14	18.9%
Laxatives	10	13.5%
Weight control medications	18	24.3%
Others	8	10.8%

Table (7): Effect of health related knowledge on their behavior

	No. of students	**Percentage**
I don't care much about my health	7	9.85%
I become more aware of sign and symptoms	19	26.76%
I can do self diagnosis and self-treatment	45	63.3%

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